

CLAIMS:

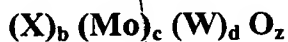
1. A process for producing a hydrocrackate having a relatively low sulfur and nitrogen content, which process comprises:

reacting said feedstream in a single reaction stage, in the presence of a hydrogen treat gas, as is passes through two or more catalyst beds wherein the upstream most catalyst bed is comprised of a bulk multimetallic catalyst comprised of at least one Group VIII non-noble metals and at least two Group VIB noble metals wherein the ratio of Group VIB metals to Group VIII non-noble metals is about 10:1 to about 1:10, and the downstream most is comprised of a hydrocracking catalyst, which single reaction stage is operated at a temperature of about 300 to 450°C, and hydrogen pressures from about 85 to 200 bar (1250-2915 psig), thereby resulting in a hydrocrackate being substantially lower in sulfur and nitrogen than the feedstock

2. The process of claim 1 wherein Group VIII non-noble metal is selected from Ni and Co and the Group VIB metals are selected from Mo and W.

3. The process of claim 1 wherein two Group VIB metals are present as Mo and W and the ratio of Mo to W is about 9:1 to about 1:9.

4. The process of 1 wherein the bulk multimetallic catalyst is a trimetallic catalyst represented by the formula:



wherein X is a Group VIII non-noble metal, the molar ratio of b: (c+d) is 0.5/1 to 3/1.

5. The process of claim 1 wherein the bulk multimetallic catalyst is amorphous and has a unique X-ray diffraction pattern showing crystalline peaks at $d = 2.53$ Angstroms and $d = 1.70$ Angstroms.

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6. The process of claim 5 wherein the Group VIII non-noble metal is nickel.
7. The process of claim 1 wherein the feedstock is hydrotreated in a first reaction stage containing one or more reaction zones and the effluent is hydrocracked in a second reaction stage, also containing one or more reaction zones.
8. The process of claim 1 wherein the effluent from the hydrotreating stage is passed to a separation zone wherein the resulting bottoms are fed to the hydrocracking stage.
9. The process of claim 1 wherein the Group VIII non-noble metal is selected from Ni and Co and the Group VIB metals are selected from Mo and W.
10. The process of claim 1 wherein the bulk multimetallic is represented by the formula:
- $$(X)_b (Mo)_c (W)_d O_z$$
- wherein X is a Group VIII non-noble metal, and the molar ratio of b: (c+d) is 0.5/1 to 3/1, preferably 0.75/1 to 1.5/1, more preferably 0.75/1 to 1.25/1.
11. The process of claim 3 wherein the molar ratio of c:d is preferably >0.01/1, more preferably >0.1/1, still more preferably 1/10 to 10/1, still more preferably 1/3 to 3/1, most preferably substantially equimolar amounts of Mo and W, e.g., 2/3 to 3/2; and $z = [2b + 6(c+d)]/2$.
12. The process of claim 1 wherein the bulk multimetallic catalyst is essentially an amorphous material having a unique X-ray diffraction pattern showing crystalline peaks at $d = 2.53$ Angstroms and $d = 1.70$ Angstroms.

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